Texas Transportation Pooled Fund Project – Progress Report

Project Title: Investigation of the Fatigue Life of Steel Base Plate to Pole Connections for Traffic Structures	
Project Number: TPF-5(116) / 9-1526	Project Manager – Name & Contact Info: Tim Bradberry, Bridge Division, TxDOT tbradber@dot.state.tx.us
Term of Contract: 11/4/05 – 8/31/09	
Reporting Period: 03/01/09 – 06/30/09	
As part of a related TxDOT testing program Ultrasonic Testing (UT) used to look for internal crack indications in compression regions of some specimens previously tested and around the entire perimeters of two large diameter high mast pole test specimens tested during the reporting period.	
Two large diameter high mast pole specimens were fabricated by Valmont and tested in the laboratory. Fatigue testing on these two large diameter poles was completed in mid-June. The failures were recorded at N=470,711 cycles and N=245,746 cycles (E' category). This low fatigue performance is attributed to internal cracking caused by the galvanizing process.	
A wrap-up meeting is being planned, to take place in August, to discuss the findings of the project.	
Project is scheduled to terminate on August 31, 2009.	
Expenditures Life-to-date: \$ 545,044	